Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 10. (Cancelled)

11. (Currently Amended): An SOI device having a gate, comprising:

oxygen ~~or halogen~~ ions providing implants in a substrate of an SOI device; and

one or more additional gate regions covering all implants under the one or more additional gate regions, the ions forming thicker gate oxide regions, and reducing substrate resistance under each of the additional gate regions.

12. (Original): The SOI device as recited in claim 11, further comprising:

implanted ions in the substrate, the one or more additional gate regions covering the implanted ions.

13. (Original): The SOI device as recited in claim 11, further comprising:

a gate oxide covering the ions and being under the one or more additional gate regions.

14. (Original): The SOI device as recited in claim 11, further comprising:

a gate of the SOI device;

a gate oxide under the gate and under the one or more additional gate regions; and

the gate oxide covering the ions.

15. (Original): The SOI device as recited in claim 11, further comprising:

a gate electrode layer forming an SOI device gate and the one or more additional gate regions; and

a gate oxide layer under the gate and under the one or more additional gate regions.

16. (Original): The SOI device as recited in claim 11, further comprising:
an SOI device gate and the one or more additional gate regions being formed from a gate electrode layer; and
a gate oxide layer wherein the gate oxide layer is under the gate and under the one or more additional gate regions.

17. (Original): The SOI device as recited in claim 11, further comprising:
a thin gate oxide layer having a thicker gate oxide covering the ions;
an SOI device gate on the thin gate oxide layer; and
the one or more additional gate regions being on the thicker gate oxide.

18. (Original): The SOI device as recited in claim 11, further comprising:
the thicker gate oxide being a selective epitaxy growth.

19. (Original): The SOI device as recited in claim 11, further comprising:
the substrate having an STI enclosure for the ions.

20. (Withdrawn): An SOI device in a substrate on a semiconductor wafer, comprising:
a semiconductor layer as part of the substrate;
an additional gate electrode on the substrate; and
oxygen ions in the substrate forming implants in a gate oxide region under the additional gate electrode.

21. (Withdrawn): The SOI device of claim 20, further comprising:
doped ion implants under the gate electrode, the doped ion implants forming a source and drain in the substrate.

22. (Withdrawn): The SOI device of claim 20, further comprising:

a buried oxide layer covering the semiconductor wafer; and

the semiconductor layer being on the buried oxide layer.

23. (Withdrawn): The SOI device of claim 20 wherein, the semiconductor layer is a P-substrate, and the doped ion implants are N+ doped ions.

24. (Withdrawn): The SOI device of claim 20 wherein, the semiconductor layer is an N-substrate, and the doped ion implants are P+ doped ions.

25. (Withdrawn): The SOI device of claim 20, further comprising:

at least one additional gate region on the gate electrode; and

the oxygen ions forming a thick gate oxide region under said additional gate region.

26. (Withdrawn): The SOI device of claim 20, further comprising:

additional gate regions on the gate electrode forming an H-gate; and

the oxygen ions forming shallow trench isolation regions.

27. (Withdrawn): An SOI device in a substrate on a semiconductor wafer, comprising:

a semiconductor layer as part of the substrate;

a gate electrode on the substrate; and

halogen ions in the substrate forming implants in a gate oxide region under the gate electrode.

28. (Withdrawn): The SOI device of claim 27, further comprising:

doped ion implants under the gate electrode, the doped ion implants forming a source and drain in the substrate;

29. (Withdrawn): The SOI device of claim 27, further comprising:

a buried oxide layer covering the semiconductor wafer; and

the semiconductor layer being on the buried oxide layer.

30. (Withdrawn): The SOI device of claim 27 wherein, the semiconductor layer is a P-substrate, and the doped ion implants are N+ doped ions.

31. (Withdrawn): The SOI device of claim 27 wherein, the semiconductor layer is an N-substrate, and the doped ion implants are P+ doped ions.

32. (Withdrawn): The SOI device of claim 27, further comprising:

at least one additional gate region on the gate electrode; and

the halogen ions forming a thick gate oxide region under said additional gate region.

33. (Withdrawn): The SOI device of claim 27, further comprising:

additional gate regions on the gate electrode forming an H-gate; and

the halogen ions forming shallow trench isolation regions.

34. (Withdrawn): The SOI device of claim 27 wherein, the halogen ions are fluorine ions.

35. (New) An SOI device having a gate, comprising:

fluorine ions providing implants in a substrate of an SOI device; and

one or more additional gate regions covering all implants under the one or more additional gate regions, the ions forming thicker gate oxide regions, and reducing substrate resistance under each of the additional gate regions